

### **NCDOT Works Through Winter Weather**



NCDOT crews and equipment made their way from Pasquotank County to Asheville during the storm.

Statewide, NCDOT employees worked night and day during a storm that brought snow, sleet, freezing rain and ice across North Carolina Jan. 22 through Jan. 24. As of Feb. 1, over 2,275 employees across North Carolina spread over 2.2 million gallons of brine, with 1,604 NCDOT trucks/graders and 665 contractor trucks. Additionally, they used over 75,000 tons of salt and over 27,000 tons of sand/salt mix.

Crews worked 12-hour alternating shifts throughout the storm and over the weekend, plowing roads, sawing and clearing fallen trees from roads and salting bridges and overpasses throughout the state.

Places in eastern counties that saw lesser impacts from the storm even sent crews to help harder hit areas, sharing

### **Stay Connected**









N.C. Transportation Now

On the most recent episode of N.C. Transportation Now: the Division of Aviation provides a one-stop shop for North Carolina drone operators, NCDOT seeks new partners for its 2016 Watch for Me NC Campaign, the Division of Vehicles' Motor new mobile office hits the **NCDOT** road, and reminds people to not drink and drive for Super Bowl Sunday.

Watch this week's

N.C. Transportation

Now

resources and helping clear roadways in the western part of the state. Maintenance crews from Washington and Pasquotank counties arrived in the Asheville area Saturday night to assist with response efforts there. Twelve trucks from Sampson County arrived in Raleigh Sunday, and NCDOT transferred additional equipment from the coastal area to Durham County. The NCDOT State Farm Safety Patrol had helped more than 200 disabled motorists and assisted in 215 wrecks statewide as of Sunday morning.

For more information about how NCDOT works before, during and after the storm, <u>click here</u>.

## New Interchange Design Brings Travel Improvements to Asheville



Crews work on the diverging diamond interchange near Asheville.

Drivers using Interstate 26 at Airport Road and N.C. 280 south of Asheville are finding themselves on one of the newest types of interchanges on North Carolina highways. The "diverging diamond" interchange (DDI) open since late last year has unique characteristics that motorists need to pay attention to on their first few trips through it. Being something new and different, a DDI can at first be confusing, but eventually drivers will see the benefits.

It is the first of its kind in the area and one of just a handful across the state.

Although the traffic pattern is in place, concrete work and other improvements for the interchange are continuing so drivers need to be careful in the area.

"We expect it will be at least a few more months before the interchange is finished," said Division 13 Construction Engineer Ricky Tipton. "That means workers will be out along the

roadway and for their safety and that of drivers and their passengers, we need people to observe the constructions signs and slow down while going through the work zone."

Essentially a DDI allows for the movement of high volumes of traffic through an intersection without increasing the number of lanes and traffic signals. This reduces congestion by allowing traffic to keep moving through an intersection.

More importantly it improves safety by allowing free-flowing turns when entering and exiting an interstate, eliminates last-minutelane changes. In this case, if a driver wants to enter or exit I-26, they no longer have to cross opposite lanes to make a left turn, which is now free-flowing. Instead drivers proceed through a traffic signal at the interchange entrance, follow their lane to the opposite side of the roadway and turn left on the on-ramp without having to stop for additional traffic signals or wait for oncoming traffic to pass. Pavement markings and signals direct motorists to where they need to go.

An initial review of the DDI that opened at the Catawba Avenue/I-77 Exit 28 interchange in Cornelius showed it dropped the crash rate by 60 percent at that location.

A DDI is also often built at a lower cost than a conventional interchange setup as it can be constructed using the existing bridge structure and the existing right-of-way, such as this case were the bridge over I-26 is part of the new setup.

A <u>visualization</u> may be the best way to show how it works. You can also get considerable background at <a href="http://www.divergingdiamond.com">http://www.divergingdiamond.com</a>.

The addition of the DDI was part of the overall Airport Road improvement project to improve traffic flow along the route. The project is expected to wrap up late this year.

# Crews in Buncombe, Burke, Madison, McDowell, Mitchell, Rutherford and Yancey Counties Respond to Winter Weather



NCDOT crews from the coast arrive in Asheville to help local DOT crews clear roads in the region during the winter storm.

January brought the season's first significant round of winter weather to Buncombe, Burke, Madison, McDowell, Mitchell, Rutherford and Yancey counties, including a one-day record for snowfall in Asheville. While this was good news for the ski slopes, it was not-so-good news for travelers or the N.C. Department of Transportation's maintenance crews who are responsible for clearing nearly 10,000 lane miles of roads across the division. Gusty winds, ice and single-digit temperatures in some areas posed a greater challenge.

Under the department's "bare-pavement snow removal policy", all work concentrates on the interstates and main roads through the length of a storm. Only once the snow stops, and those major roadways are clear do crews switch to other U.S. and N.C. routes and then secondary and development roads in the state system. In Division 13 it can take some time to move on to the smaller roadways, as crews have to clear more than 1,600 lane miles of interstate and U.S. routes.

More than 320 employees, operating about 220 pieces of equipment, worked throughout the storm to clear the roads. They used more than 7,350 tons of salt, and nearly 13,170 tons of a salt and sand mixture to help melt the snow and ice, and provide traction.

As with any such event, NCDOT had crews in less-affected areas ready to hit the road and help counties. A crew of eight employees with four plow trucks, two road graders and service truck from Washington and Pasquotank counties arrived on Saturday, Jan. 23 to assist division personnel with snow and ice removal.

### Steve Abbott

Communications Manager Phone: (919) 707.2660

Jay Swain, P.E.

Division 13 Engineer

### **David Brown**

Division 13 Board of Transportation Board Member

NC Department of Transportation | ncdot.gov

Copyright © 2015. All Rights Reserved.